

CLAIMS

What is claimed is:

- 1 1. A method accessing a Basic Input/Output System (BIOS) routine comprising:
2 requesting exclusive ownership of the BIOS routine by a software stream;
3 receiving an indication by the software stream of the results of the requesting step; and if
4 the requesting exclusive ownership step is successful
5 using the BIOS routine by the software stream; and
6 returning the BIOS routine by the software stream for use by other software streams.
- 1 2. The method of accessing a BIOS routine as defined in claim 1 wherein receiving an
2 indication by the software stream of the results of the requesting step further comprises receiving
3 an open handle by the software stream if the requesting exclusive ownership step is successful.
- 1 3. The method of accessing a BIOS routine as defined in claim 2 wherein receiving an
2 indication by the software stream of the results of the requesting step further comprises receiving a
3 number representing a valid handle by the software stream if the requesting exclusive ownership
4 step is successful.
- 1 4. The method of accessing a BIOS routine as defined in claim 2 wherein receiving an
2 indication by the software stream of the results of the requesting step further comprises receiving a
3 number representing an invalid handle by the software stream if the requesting exclusive
4 ownership step is unsuccessful.

1 5. The method of accessing a BIOS routine as defined in claim 2 wherein returning the BIOS
2 routine by the software stream for use by the other software streams further comprises closing the
3 BIOS routine by the software stream such that the other software streams may be granted exclusive
4 ownership.

1 6. The method of accessing a BIOS routine as defined in claim 5 wherein closing the BIOS
2 routine by the software stream further comprises returning the open handle.

3 7. A computer system comprising:
4 a microprocessor;
5 a main memory array;
6 a first bridge logic device coupling the microprocessor and main memory array;
7 a graphics controller coupled to the first bridge logic device;
8 a video display coupled to the graphics controller;
9 a second bridge logic device coupled to the first bridge logic device by way of a primary
10 expansion bus;
11 a Read Only Memory (ROM) coupled to the second bridge logic device by way of a
12 secondary expansion bus, the ROM storing Basic Input/Output System (BIOS) routines;
13 a software stream executed by the microprocessor, the software stream calls BIOS routines;
14 and
15 wherein the software stream requests exclusive ownership of a BIOS routine prior to its
use, and if the software stream is granted exclusive ownership, the software stream uses the BIOS
routine and then returns the exclusive ownership.

8. The computer system as defined in claim 7 wherein the software steam is further adapted to request ownership again if exclusive ownership is denied.

9. The computer system as defined in claim 7 wherein the software stream receives a valid handle to the BIOS routine if the software stream is granted exclusive ownership of the BIOS routine.

10. The computer system as defined in claim 7 wherein the software stream returns exclusive ownership by returning the valid handle.

11. The computer system as define in claim 7 wherein the software stream receives an invalid handle to the BIOS routine if the software stream is not granted exclusive ownership of the BIOS routine.

12. In a computer system having a microprocessor executing a software thread, the software thread adapted to call Basic Input/Output System (BIOS) routines, a method of calling BIOS routines comprising:

opening the BIOS routines by the software thread to the exclusion of other software threads;

using the BIOS routines by the software thread; and

closing the BIOS routines by the software thread when the utilizing step is complete.

1 13. The method of calling BIOS routines as defined in claim 12 wherein opening the BIOS
2 routines by the software thread to the exclusion of other software threads further comprises
3 requesting exclusive ownership of the BIOS routines by the software thread.

1 14. The method of calling BIOS routines as defined in claim 13 wherein opening the BIOS
2 routines by the software thread to the exclusion of other software threads further comprises
3 receiving an open handle if the requesting exclusive ownership step is successful.

1 15. The method of calling BIOS routines as defined in claim 13 wherein opening the BIOS
2 routines by the software thread to the exclusion of other software threads further comprises
3 receiving an invalid handle if the requesting exclusive ownership step is unsuccessful.

1 16. The method of calling BIOS routines as defined in claim 12 wherein opening the BIOS
2 routines by the software thread to the exclusion of other software threads further comprises
3 receiving an open handle if the opening the BIOS routines step is successful.

1 17. The method of calling BIOS routines as defined in claim 16 wherein closing the BIOS
2 routines by the software thread when the utilizing step is complete further comprises returning the
3 open handle.

1 18. In a computer system with a microprocessor, main memory and a read only memory
2 storing Basic Input/Output System (BIOS) routines, a method of operating the BIOS routines
3 comprising:

4 receiving a request for permission to use the BIOS routines;
5 checking whether permission has been previously granted; and
6 granting permission to use the BIOS routines if permission has not been previously
7 granted.

1 19. The method of operating the BIOS routines as defined in claim 18 wherein granting
2 permission to use the BIOS routines if permission has not been previously granted further
3 comprises returning a valid handle of the BIOS routines.

1 20. The method of operating the BIOS routines as defined in claim 18 further comprising
2 denying permission to use the BIOS routines if permission has been previously granted.

1 21. The method of operating the BIOS routines as defined in claim 20 wherein denying
2 permission to use the BIOS routines if permission has been previously granted further comprises
3 returning an invalid handle of the BIOS routines.